



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/996,070	11/28/2001	Nicolo Manaresi	00AG14453318	1132

27975 7590 08/11/2003

ALLEN, DYER, DOPPELT, MILBRATH & GILCHRIST P.A.
1401 CITRUS CENTER 255 SOUTH ORANGE AVENUE
P.O. BOX 3791
ORLANDO, FL 32802-3791

EXAMINER

MARTIR, LILYBETT

ART UNIT

PAPER NUMBER

2855

DATE MAILED: 08/11/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

NC

Office Action Summary	Application No. 09/996,070	Applicant(s) MANARESI ET AL.	
	Examiner Lilybett Martir	Art Unit 2855	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☐ Responsive to communication(s) filed on ____.

2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) 16-34 is/are pending in the application.

 4a) Of the above claim(s) ____ is/are withdrawn from consideration.

5) ☐ Claim(s) ____ is/are allowed.

6) ☒ Claim(s) 16-19, 21-26, 28-32 and 34-36 is/are rejected.

7) ☒ Claim(s) 20, 27 and 33 is/are objected to.

8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on 28 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
 If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:

 1. ☒ Certified copies of the priority documents have been received.

 2. ☐ Certified copies of the priority documents have been received in Application No. ____.

 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

 * See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____.
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>6</u> .	6) <input type="checkbox"/> Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 16-17,23-24,29-30 and 35 are rejected under 35 U.S.C. 102(b) as being anticipated by Bourland et al. (Pat. 5,010,772).

- With respect to claims 16,23,29 and 35, Bourland et al. teaches an array of pressure sensing pixel capacitors or sensing adjacent metal plates as in elements 22 and 24 comprising column and row electrodes orthogonal to each other and spaced by an elastically compressible dielectric 20 as noted in Figure 2, and a system for biasing and reading the capacitance of said capacitors which are comprised by column electrode and row electrode selection circuits as are switching elements 25₁-25₃ and 26₁-26₃ and a logic circuit for the sequential scanning of the pressure sensing arrangements(Col. 7, lines 49-68) as noted in Figures 4-6 (Col. 2, lines 41-68).
- With respect to claims 17,24 and 30, Bourland et al. teaches the utilization of column and row electrodes as the ones disposed in Figure 8 in layers 36 and 40 that comprise a fabric as in elements 42 and 43 including horizontal oriented threads of dielectric material and warp oriented threads of dielectric

Art Unit: 2855

material (Col. 8, lines 9-13), the fabrics being fastened onto opposite faces of the elastically compressive dielectrics 38.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 18,25 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bourland et al. (Pat. 5,010,772) in view of Nomura et al. (Pat. 5,920,454).

- With respect to claims 18,25 and 31, Bourland fails to teach the utilization of a conductive paint to form the electrodes. Nomura et al. teaches the arrangement of a conductive paint 5 arranged over dielectric 4. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the teachings of the pressure measuring system of Bourland et al. using the teachings of the capacitive arrangement of Nomura et al. by utilizing a conductive paint to form the electrodes therefore making system smaller and thinner, so it is capable of being used in smaller spaces.

5. Claims 19,21-22,26,28,32 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bourland et al. (Pat. 5,010,772) in view of Wright et al. (Pat. 4,348,635).

- With respect to claims 19,26 and 32, Bourland et al. fails to teach the utilization of a conductive tape to form the electrodes. Wright et al. teaches

the arrangement of a dielectric element 13 joined on each side by conductive strips or tapes (Col. 3, lines 32-40). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the teachings of the pressure measuring system of Bourland et al. using the teachings of the capacitive arrangement of Wright et al. by utilizing conductive adhesively secured taped which allows for the system to be more flexible and easier to manufacture.

- With respect to claims 21,28 and 34, Bourland et al. teaches utilizing a dielectric, which is a gas filled cushion (Col. 4, lines 8-10).
- With respect to claim 22, Bourland et al. fails to teach the specific utilization and incorporation of the claimed device in a sail. Bourland does teach a capacitive system to be utilized for pressure distribution measuring to be utilized in medical environments. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the teachings of the pressure measuring system of Bourland et al. using the same capacitive arrangement as taught by him in a different application to monitor pressure as he does to therefore make a device versatile.

6. Claims 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bourland et al.

- With respect to claim 36, Bourland et al. teaches producing distribution maps of pressure distribution. He fails to teach the specific utilization and incorporation of the claimed device in a sail. Bourland does teach a

capacitive system to be utilized for pressure distribution measuring to be utilized in medical environments. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the teachings of the pressure measuring system of Bourland et al. using the same capacitive arrangement as taught by him in a different application to monitor pressure as he does to therefore make a device versatile

Allowable Subject Matter

7. Claims 20,27 and 33 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims, or if the limitations in said claim are incorporated on the base claim, including all of the limitations of the base claim and any intervening claims.

Citation of Prior Art

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art considered pertinent during examination of the examined application is:

- Dimmick et al. (Pat. 5,723,797) Container inspection apparatus having diameter measuring means and associated method.
- Boie et al. (Pat. 4,526,043) Conformable tactile sensor.
- Nicol (Pat. 4,437,138) Force sensing means and method of producing such sensing means.

Art Unit: 2855

- Kustanovich (Pat. 4,644,801) Surface area pressure transducer and line selection circuit for use therewith.
- Nicol et al. (Pat. 4,135,063) Apparatus for the time dependent measurement of physical quantities.

Conclusion


9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lilybett Martir whose telephone number is (703)305-6900. The examiner can normally be reached on 9:00 AM to 5:30 PM.


10. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Lefkowitz can be reached on (703)305-4816. The fax phone numbers for the organization where this application or proceeding is assigned are (703)305-3432 for regular communications and (703)305-3432 for After Final communications.

11. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0956.



Lilybett Martir
Examiner
Art Unit 2855


July 30, 2003


EDWARD LEFKOWITZ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800